

What is claimed is:

1. A composition comprising a plurality of polynucleotides having the nucleic acid sequences of SEQ ID NOs:1-13 or the complements thereof.

2. An isolated polynucleotide comprising a nucleic acid sequence selected from SEQ ID NOs:1-20
5 or the complement thereof.

3. A composition comprising a polynucleotide of claim 2 and a labeling moiety.

4. A method of using a composition to screen a plurality of molecules to identify at least one ligand which specifically binds a polynucleotide of the composition, the method comprising:

a) combining the composition of claim 1 with molecules under conditions to allow specific
10 binding; and

b) detecting specific binding, thereby identifying a ligand which specifically binds the polynucleotide.

5. The method of claim 4 wherein the molecules to be screened are selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, and proteins.

6. A method of using a polynucleotide to purify a ligand, the method comprising:

a) combining the polynucleotide of claim 2 with a sample under conditions to allow specific
15 binding;

b) recovering the bound polynucleotide; and

c) separating the ligand from the bound polynucleotide, thereby obtaining purified ligand.

7. The method of claim 7 wherein the polynucleotide is attached to a substrate.

8. The method of claim 7 wherein the molecules to be screened are selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, and proteins.

9. A method for using a composition to detect gene expression in a sample containing nucleic acids, the method comprising:

a) hybridizing the composition of claim 1 to the nucleic acids under conditions for formation
25 of one or more hybridization complexes; and

b) detecting hybridization complex formation, wherein complex formation indicates gene expression in the sample.

10. The method of claim 9 wherein the composition is attached to a substrate.

11. The method of claim 9, gene expression indicates the presence of cancer.

12 ~~13~~. A vector comprising a polynucleotide of claim 2.

13 ~~14~~. A host cell comprising the vector of claim 13.

14 ~~15~~. A method for using a host cell to produce a protein, the method comprising:

a) culturing the host cell of claim 14 under conditions for expression of the protein; and

b) recovering the protein from cell culture.

15 ~~16~~. A purified protein obtained using the method of claim 15.

16 ~~17~~. A composition comprising the protein of claim 16 and a pharmaceutical carrier.

17 ~~18~~. A method for using a protein to screen a plurality of molecules to identify at least one ligand which specifically binds the protein, the method comprising:

a) combining the protein of claim 16 with the plurality of molecules under conditions to allow specific binding; and

b) detecting specific binding, thereby identifying a ligand which specifically binds the protein.

18 ~~19~~. The method of claim 18 wherein the plurality of molecules is selected from DNA molecules, RNA molecules, peptide nucleic acids, mimetics, proteins, agonists, antagonists, and antibodies.

19 ~~20~~. A method of using a protein to purify a ligand from a sample, the method comprising:

a) combining the protein of claim 16 with a sample under conditions to allow specific binding;

b) recovering the bound protein; and

c) separating the ligand from the bound protein, thereby obtaining purified ligand.